

Table A15. Equations for earned degrees conferred

Dependent Variable	Equation					R ²	Durbin-Watson statistic ¹	Estimation technique ²	Rho	Time period
Associate's degrees Men	ASSOCM	=	106,844	+ 56.6UGFT2M (1.5)	+ 39.2UGPT2M (2.2)	0.83	1.6	AR1	0.73 (4.6)	1970–71 to 2000–01
Associate's degrees Women	ASSOCW	=	93,045	+ 180.6UGFT2W (5.9)		0.99	1.4	AR1	0.98 (47.5)	1970–71 to 2000–01
Bachelor's degrees Men	BACHM	=	218,515	- 10.4P1824M (-3.3)	+ 180.6UGFT4M (6.4)	0.89	1.7	AR1	0.64 (4.2)	1970–71 to 2000–01
Bachelor's degrees Women	BACHW	=	190,194	- 15.7P1824W (-2.9)	+ 246.8UGFT4W (17.4)	0.99	1.2	AR1	0.81 (6.8)	1970–71 to 2000–01
Master's degrees Men	MASTM	=	35,513	+ 405.9GFTM (5.4)		0.95	1.3	AR1	0.90 (12.3)	1970–71 to 2000–01
Master's degrees Women	MASTW	=	36,718	+ 544.3GFTW (15.3)		0.99	1.1	AR1	0.92 (14.6)	1972–73 to 2000–01
Doctor's degrees Men	DOCM	=	19,749	+ 19.3GFTM1 (1.1)	- 12.8RUC (-0.9)	0.89	1.1	AR1	0.96 (21.6)	1970–71 to 2000–01
Doctor's degrees Women	DOCW	=	- 1,582	+ 0.4P3544W (2.6)	+ 31.2GFTW (5.4)	0.99	2.2	AR1	0.72 (3.9)	1972–73 to 2000–01
First-professional degrees Men	FPROM	=	10,292	+ 228.7PFPTM (7.0)		0.88	1.9	AR1	0.51 (2.6)	1970–71 to 2000–01
First-professional degrees Women	FPROW	=	- 1,156	+ 284.2FPPTW (24.0)	+ 227.1FPPTW (2.2)	0.99	1.5	OLS	†	1971–72 to 2000–01

†Not applicable.

¹For an explanation of the Durbin-Watson statistic, see J. Johnston, *Econometric Methods*, New York: McGraw-Hill, 1972, pages 251–252.²AR1 indicates an estimation procedure for correcting the problem of first-order autocorrelation. OLS indicates Ordinary Least Squares. For a general discussion of the problem of autocorrelation, and the method used to forecast in the presence of autocorrelation, see G. Judge, W. Hill, R. Griffiths, H. Lutkepohl, and T. Lee, *The Theory and Practice of Econometrics*, New York: John Wiley and Sons, 1985, pages 315–318.**Where:**

ASSOCM = Number of associate's degrees awarded to men

ASSOCW = Number of associate's degrees awarded to women

BACHM = Number of bachelor's degrees awarded to men

BACHW = Number of bachelor's degrees awarded to women

MASTM = Number of master's degrees awarded to men

MASTW = Number of master's degrees awarded to women

DOCM = Number of doctor's degrees awarded to men

DOCW = Number of doctor's degrees awarded to women

FPROM = Number of first-professional degrees awarded to men

FPROW = Number of first-professional degrees awarded to women

UGFT2M = Full-time male undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands

UGPT2M = Part-time male undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands

UGFT2W = Full-time female undergraduate enrollment in 2-year institutions, lagged 2 years, in thousands

P1824M = Population of 18- to 24-year-old men, in thousands

P1824W = Population of 18- to 24-year-old women, in thousands

UGFT4M = Full-time male undergraduate enrollment in 4-year institutions, lagged 2 years, in thousands

UGFT4W = Full-time female undergraduate enrollment in 4-year institutions, lagged 3 years, in thousands

GFTM = Full-time male graduate enrollment, in thousand

GFTW = Full-time female graduate enrollment, in thousand

P3544W = Population of 35- to 44-year-old women, in thousands

GFTM1 = Full-time male graduate enrollment lagged 1 year, in thousand

GFTW = Full-time female graduate enrollment, in thousand

RUC = Unemployment rate

FPFTM = Full-time male first-professional enrollment lagged 2 years, in thousands

FPPTW = Full-time female first-professional enrollment lagged 1 year, in thousands

FPPTW = Part-time female first-professional enrollment lagged 2 years, in thousands

NOTE: R² indicates the coefficient of determination. Rho measures the correlation between errors in time period t and time period t minus 1. Numbers in parentheses are t-statistics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Earned Degrees Conferred Model.

(This table was prepared July 2003.)